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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,452	02/10/2004	Paul R. Meernik	GP-303904	9416

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EXAMINER

WILLIAMS, THOMAS J

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

JB

Office Action Summary	Application No. 10/775,452	Applicant(s) MEERNIK ET AL.	
	Examiner Thomas J. Williams	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11, 14-16 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 7, 9, 12 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 2, 4, 6, 8, 10 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Applicant's election of Species A in the reply filed on January 14, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

2. Claim 2 is objected to because of the following informalities: in lines 2 and 3-4, "the member" should be changed to "the threaded member". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3, 5, 7, 9, 12, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,995,327 to Wood in view of US 5,423,400 to Wesselski.

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Re-claims 1 and 20, Wood teaches a load carrying axial positioner with overload energy absorption, comprising: an outer tube 22 and/or 58; a threaded actuator rod 61 (see column 3 lines 72-75 to column 4 lines 1-4) extends between a first and second end of the outer tube; a drive (interpreted as head portion 68) is operable to rotate the actuator rod; a threaded member 64 is mounted to the actuator rod and is movable between the ends of the outer tube, the threaded member includes a radial flange extending toward the outer tube, the flange is interpreted as element 66 and/or as a radial extension of element 64; a radially extending load ring 18 is movable within the tube and is spaced axially from the radial flange; a spring is positioned between the radial flange and the load ring (when viewing the load transmission path), the spring generates a resistance to axial motion of the load ring; the load ring has a plurality of axially extending force transmitting elements 48 extending through one end of the outer tube (note element 32 and that elements 48 extend beyond outer tube 58); the load ring with the force transmitting elements operatively engage the threaded member for axial motion therewith. However, Wood fails to teach the spring as being radially expandable or the presence of a radially expanding spring that will exert a force against the outer tube, such as tube 22.

Wesselski teaches an energy absorbing device that utilizes a radially expanding spring 35 that engages an inner wall of an outer tube 23. The spring absorbs energy from the movement of the shaft, see column 5 lines 24-36. It would have been obvious to one of ordinary skill in the art to have provided the device of Wood with a radially expanding spring as taught by Wesselski, thus providing the device with an relatively compact element that absorbs energy in an increasing manner with increasing movement of the load ring. The spring provided by Wesselski would expand under compression loads acting on the force transmitting elements.

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Re-claims 3, 5, 7 and 9, element 66 is welded to tube 24 and would be expected to yield at a predetermined load applied on the load ring and subsequently to the stop element 66.

Re-claim 12, the threads of the actuator rod are expected to shear under a predetermined load. It is expected that an excessive load applied to the device will result in the teeth being sheared.

Re-claims 17 and 18, the spring is a conic spring, which is functionally equivalent to a wave spring. As known in the art wave springs will expand in a radially outward direction when compressed. It would have been obvious to one of ordinary skill in the art as a matter of design choice to utilized a wave spring in the device of Wood as modified by Wesselski, since the applicant has not disclosed that having a wave spring solves any stated problem or is for any particular purpose and it appears that a wave spring would have performed equally well in the device of Wood.

Re-claim 19, the drive of Wood is mechanical. However, it is the opinion of the examiner that the substitution of electromechanical means for purely mechanical means is known in the art, usually providing for remote control. It would have been obvious to one of ordinary skill in the art to have provided the actuator rod of Wood with a remotely driven electromechanical device, thus allowing for a load adjustment from a relatively safe location.

Allowable Subject Matter

6. Claims 2, 4, 6, 8, 10 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Muller, Browne et al., and Namuduri et al. each teach an axial positioner with overload energy absorption. Vanell teaches the concept that wave spring expand under compression.

8. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346 (after April 2005 the new telephone number will be 571-272-7128). The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci, can be reached at (703) 308-3668 (after April 11, 2005 the new telephone number will be 571-272-7099). The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

THOMAS WILLIAMS
PATENT EXAMINER

Thomas Williams
AU 3683
3-15-05

TJW

March 15, 2005